UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,834	04/25/2001	Olga Kapitskaia	2000-0255	5821

7590 11/10/2003	EXAMINER
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ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _08 September 2003_ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-12_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-12_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

   If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

   a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1.   This office action is in response to the request for consideration filed on September 8, 2003, in which claims 1-12 are presented for further examination.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

3.   Applicants are required to furnish the formal drawings in response this office action. No new matter may be introduced in the required drawing. Failure to timely submit a drawing will result in ABANDONMENT of the application

Claim Rejections - 35 U.S.C. § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.   .

5.   Claim 1 recites the limitation "directory entries can be stored in **the cache**" in line 5, while the preamble, for example, recites a network **directory cache**. It is unclear as to which cache the applicants are referred to.

Claim 5 recites the limitation "directory entries to store in **the cache**" in line 3, while the preamble,

for example, recites a network **directory cache**. It is unclear as to which cache the applicants are

referred to.

Claim 8 recites the limitation "directory entries can be stored in **the cache**" in line 7, while the

preamble, for example, recites a network **directory cache**. It is unclear as to which cache the

applicants are referred to.

There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 U.S.C. § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that
> the subject matter as a whole would have been obvious at the time the invention was made to a person having
> ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner
> in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims

under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

commonly owned at the time any inventions covered therein were made absent any evidence to the

contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and

invention dates of each claim that was not commonly owned at the time a later invention was made

in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.   Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over schneck et al (hereinafter "Schneck") US Patent no. 6,208,986 in view of Srbljic et al., (hereinafter "Srbljic") US Patent no. 6,154,811.

As to claim 1, Schneck discloses the claimed "receiving and storing a plurality of user queries" as a means for receiving at least one information request (col.2, lines 52-53); and "creating a query template that generalizes the user queries" as a means for creating a template base on the query requested (col.2, lines 53-57). However, Schneck does not explicitly disclose the use of receiving directory entries answering the query template so that the directory entries can be stored in the cache. Srbljic, on the other hand, discloses the use of "receiving directory entries answering the query template so that the directory entries can be stored in the cache" as a means for receiving a client request wherein the directory list for a object is stored (col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.13, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to combine the teachings of the cited references. One of ordinary skill in the art at the time of the invention would have been motivated to do such a combination because that would provide Schneck's system the enhanced capability of efficiently caching copies of the directory entries and providing such copies to users quickly and economically, thereby improving the efficiency and the performance of the network.

As to claim 2, Srbljic discloses the claimed "wherein the directory entries are retrieved after estimating benefits of storing the directory entries in the cache"(col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.7, lines 40-67; col.13, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to combine the teachings of the cited references. One of ordinary skill in the art at the time of the invention would have been motivated to do such a combination because that would provide Schneck's system the enhanced capability of efficiently caching copies of the directory entries and providing such copies to users quickly and economically, thereby improving the efficiency and the performance of the network.

As to claim 3, Schneck discloses the claimed "wherein the query template is stored and modified as new user queries are received"(col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.7, lines 40-67; col.12, lines 53-col.13, line 12; col.13, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to combine the teachings of the cited references. One of ordinary skill in the art at the time of the invention would have been motivated to do such a combination because that would provide Schneck's system the enhanced capability of efficiently caching copies of the directory entries and providing such copies to users quickly and economically, thereby improving the efficiency and the performance of the network.

As to claim 4, Schneck discloses a lightweight directory Access Protocol (col.2, lines 17-25).

As to claim 5, Schneck discloses the claimed"receiving and storing a user query" (col.2, lines 52-57); and "generating a plurality of new candidate templates that generalize the candidate templates with the user query"(col.2, lines 38-57; col.4, lines 10-25) however, Schneck does not explicitly disclose the use of maintaining a plurality of candidate templates that may be used to retrieve directory entries to store in the cache. Srbljic, on the other hand, discloses the use of "maintaining a plurality of candidate templates that may be used to retrieve directory entries to store in the cache" as a means for receiving a client request wherein the directory list for a object is stored (col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.13, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to combine the teachings of the cited references. One of ordinary skill in the art at the time of the invention would have been motivated to do such a combination because that would provide Schneck's system the enhanced capability of efficiently caching copies of the directory entries and providing such copies to users quickly and economically, thereby improving the efficiency and the performance of the network.

As to claim 6, Srbljic discloses the claimed "wherein the new candidate templates are generated after estimating the benefits of storing the directory entries in the cache"(col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.7, lines 40-67; col.13, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to

combine the teachings of the cited references. One of ordinary skill in the art at the time of the

invention would have been motivated to do such a combination because that would provide

Schneck's system the enhanced capability of efficiently caching copies of the directory entries and

providing such copies to users quickly and economically, thereby improving the efficiency and the

performance of the network._

As to claim 7, Schneck discloses a lightweight directory Access Protocol" (col.2, lines 17-25).

As to claim 8, Schneck discloses the claimed "maintaining a plurality of candidate templates"(col.2,

lines 38-57; col.4, lines 10-25). However, Schneck does not explicitly disclose the use of estimating

the benefits of caching directory results answering the candidate templates; and selecting a candidate

template based on it benefit estimate and retrieving directory entries answering the candidate template

so that the directory entries can be stored in the cache. Srbljic, on the other hand, discloses the

claimed "selecting a candidate template based on it benefit estimate and retrieving directory entries

answering the candidate template so that the directory entries can be stored in the cache" as a means

for receiving a client request wherein the directory list for a object is stored (col.1, line 65-col.2, lines

49; col.6, lines 20-45; col.13, lines 45-65)."estimating the benefits of caching directory results

answering the candidate templates"(col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.7, lines 40-67;

col.13, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art of data

processing, at the time the present invention was made to combine the teachings of the cited

references. One of ordinary skill in the art at the time of the invention would have been motivated to do such a combination because that would provide Schneck's system the enhanced capability of efficiently caching copies of the directory entries and providing such copies to users quickly and economically, thereby improving the efficiency and the performance of the network.

As to claim 9, Schneck does not explicitly disclose the claimed "wherein the directory entries are retrieved to replace old directory entries in the cache". Srbljic, on the other hand, the claimed "wherein the directory entries are retrieved to replace old directory entries in the cache"(col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.7, lines 40-67; col.12, lines 53-col.13, line 12; col.13, lines 45-65). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to combine the teachings of the cited references. One of ordinary skill in the art at the time of the invention would have been motivated to do such a combination because that would provide Schneck's system the enhanced capability of efficiently caching copies of the directory entries and providing such copies to users quickly and economically, thereby improving the efficiency and the performance of the network.

As to claim 10, Srbljic discloses the claimed "wherein the directory entries are retrieved only if the estimated benefit is greater than an estimated benefit is not greater than an estimate of benefits of old directory entries in the cache"(col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.7, lines 40-67; col.12, lines 53-col.13, line 12; col.13, lines 45-65).

As to claim 11, Srbljic discloses the claimed "wherein old directory entries in the cache are replaced incrementally if the estimated benefit is not greater than an estimate of benefits of old directory entries in the cache"(col.1, line 65-col.2, lines 49; col.6, lines 20-45; col.7, lines 40-67; col.12, lines 53-col.13, line 12; col.13, lines 45-65)

As to claim 12, Schneck discloses a Lightweight Directory Access Protocol" (col.2, lines 17-25).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO 892).

Any inquiry concerning this communication or early communication from the Examiner should directed to **Jean M. Corrielus** whose telephone number is (703) 306-3035. The Examiner can normally be reached on Tuesday-Friday from 7:00am to 5:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu, can be reached on Monday-Friday from 9:00 a.m.-6:00 p.m. at (703)305-4393.

Any response to this action should be mailed to: Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 308-9051, (for formal communications intended for entry)

Or: (703)305-9731 (for informal or draft communications, please label "PROPOSED" or

"DRAFT") Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive,

Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed

to the group receptionist whose telephone number is (703) 305-9600.

Jean M. Corrielus

Patent Examiner

November 4, 2003